

CLAIMS

1. Handheld apparatus for checking the tension of a wire, including:
a support having two spaced pegs rigidly secured thereto;
5 a spring mounted on the support between the two pegs;
the spring and the pegs being arranged such that a wire passing in a predetermined path over and/or under the spring and the pegs is deflected from its normal position and exerts a pressure on the spring in a predetermined direction;
a displacement measuring device associated with the spring and adapted to
10 measure the displacement of the spring when a wire is in said predetermined path;
preprogrammed computing means electrically connected to the displacement measuring device and adapted to display upon a read out a reading for the tension upon the wire when the wire is in said predetermined path;
the computing means being connectable to a fully portable electrical power source.
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2. The apparatus as claimed in claim 1, wherein each peg is independently selected from the group consisting of: protrusion, notch, hook, slot.
3. The apparatus as claimed in claim 1 or 2, wherein a housing for the fully portable
20 electrical power source is incorporated in the support.
4. The apparatus as claimed in any one of claims 1-3, wherein both pegs lie in the same plane, at the same level in that plane, and the spring is at a higher level than the pegs in that plane.
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5. The apparatus as claimed in any one of claims 1-3, wherein the pegs are at different levels in the same plane.
6. The apparatus as claimed in claim 5, wherein said predetermined path for a wire to
30 be tested is under the lower peg and over the upper peg, passing over the upper surface of the spring.
7. The apparatus as claimed in claim 1 or claim 2, wherein the support is an

elongated member with a handle portion at one end, the length of the handle portion being inclined at an acute angle to the length of the remainder of the support.

- 5 8. The apparatus as claimed in claim 7, wherein at least the handle portion of the support is hollow to provide a housing for the fully portable electrical power source.
9. The apparatus as claimed in claim 7 or claim 8, wherein the pegs are spaced along the length of the support, and are secured to the support at different levels in
10 a plane parallel to the plane of the support.
10. The apparatus as claimed in claim 9 wherein at least one of said pegs is a hook.
11. The apparatus as claimed in any one of the preceding claims wherein the spring
15 has a flexibility in the range 0.0016 mm/Newton – 0.043 mm/Newton.
12. The apparatus as claimed in any one of the preceding claims wherein the displacement measuring device is selected from the group consisting of: strain gauge, load cell, potentiometer (linear or rotary), encoder (linear or rotary).
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13. The apparatus as claimed in any one of claims 1-11, wherein the displacement measuring device comprises a strain gauge secured to that surface of the spring which is not contacted by the wire in use.